Clean Version of Pending Claims

1. (Amended Once) A method of forming a semiconductor device comprising:

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forming a first patterned conductive layer on a dielectric material on a substrate;
forming a first barrier layer on the surface of the first patterned conductive layer;
forming a second barrier layer on the surface of the first barrier layer;
forming a dielectric layer on the surface of the second barrier layer; and
forming a via through a first portion of the dielectric layer and through a first portion of
one of the first and second barrier layers.

- 2. The method of claim 1 further comprising forming any one of a via, and a trench through a first portion of the dielectric layer.
- 3. The method of claim 2 further comprising forming a trench through a second portion of the dielectric layer if the via is formed through the first portion of the dielectric layer.
- 4. The method of claim 3, wherein the via is filled with a sacrificial light absorbing material comprising at least one of a dyed spin-on polymer and a dyed spin-on glass with dry etch properties similar to the dielectric layer.
- 5. The method of claim 2 further comprising forming a via through a second portion of the dielectric layer if the trench is formed through the first portion of the dielectric layer.

- 6. The method of claim 3 further comprising forming the via through the second barrier layer followed by forming the via through the first barrier layer.
- 7. The method of claim 6 wherein the via is formed through the first and the second barrier layer with a single etch pass.
- 8. The method of claim 1 wherein the first barrier layer comprises less than 20 nanometers of silicon nitride.
- 9. The method of claim 8 wherein the first barrier layer comprises between 1 nanometer and 7 nanometer of silicon nitride.
- 10. The method of claim 1 wherein the second barrier layer comprises less than 200 nanometers of silicon carbide.
- 11. The method of claim 8 wherein the silicon nitride is deposited using any one of a plasma enhanced chemical vapor deposition process, a chemical vapor deposition process and an atomic layer deposition process.
- 12. The method of claim 10 wherein the silicon carbide is deposited using any one of a plasma enhanced chemical vapor deposition process, a chemical vapor deposition process and an atomic layer deposition process.

13. (Amended Once) A method of forming a semiconductor device comprising:

forming a first patterned conductive layer on a dielectric material on a substrate;

forming a first barrier layer comprising silicon nitride on the surface of the first patterned conductive layer;

forming a second barrier layer comprising silicon carbide on the surface of the first barrier layer; and

forming a dielectric layer on the surface of the second barrier layer.

- 14. The method of claim 13 further comprising forming any one of a via, and a trench through a first portion of the dielectric layer.
- 15. The method of claim 14 further comprising forming a trench through a second portion of the dielectric layer if the via is formed through the first portion of the dielectric layer.
- 16. The method of claim 15, wherein the via is filled with a sacrificial light absorbing material comprising at least one of a dyed spin-on polymer and a dyed spin-on glass with dry etch properties similar to the dielectric layer.
- 17. The method of claim 15 further comprising forming a via through a second portion of the dielectric layer if the trench is formed through the first portion of the dielectric layer.
- 18. The method of claim 14 wherein the via is formed through the first and the second barrier layer with a single etch pass.

- 19. The method of claim 13 wherein the first barrier layer comprising silicon nitride comprises between 1 nanometer and 7 nanometer of silicon nitride.
- 20. The method of claim 13 wherein the second barrier layer comprising silicon carbide comprises less than 200 nanometers of silicon carbide.
- 21. The method of claim 13 wherein the silicon nitride and the silicon carbide is deposited using any one of a plasma enhanced chemical vapor deposition process, a chemical vapor deposition process and an atomic layer deposition process.

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22. (Amended Once) A method of forming a semiconductor device comprising:

forming a first patterned conductive layer on a dielectric material on a substrate;

forming a first barrier layer comprising silicon nitride on the surface of the first patterned conductive layer;

forming a second barrier layer on the surface of the first barrier layer;
forming a dielectric layer on the surface of the second barrier layer; and
forming a via through a first portion of the dielectric layer and through a first portion of
one of the first and second barrier layers.

- 23. The method of claim 22 further comprising forming any one of a via, and a trench through a first portion of the dielectric layer.
- 24. The method of claim 23 further comprising forming a trench through a second portion of the dielectric layer if the via is formed through the first portion of the dielectric layer.

- 25. The method of claim 24, wherein the via is filled with a sacrificial light absorbing material comprising at least one of a dyed spin-on polymer and a dyed spin-on glass with dry etch properties similar to the dielectric layer.
- 26. The method of claim 24 further comprising forming a via through a second portion of the dielectric layer if the trench is formed through the first portion of the dielectric layer.
- 27. The method of claim 24 further comprising forming the via through the second barrier layer followed by forming the via through the first barrier layer.
- 28. The method of claim 27 wherein the via is formed through the first and the second barrier layer with a single etch pass.
- 29. The method of claim 22 wherein the first barrier layer comprises between 1 nanometer and 7 nanometer of silicon nitride.
- 30. The method of claim 22 wherein the second barrier layer comprises less than 200 nanometers of silicon carbide.